IN THE CLAIMS:

Please amend the claims as set forth below:

1-32 (Cancelled)

33. (New) A method comprising:

a first node of a plurality of nodes in a computer system transmitting a posted request packet, the plurality of nodes implementing a plurality of virtual channels to communicate packets between the nodes, wherein the plurality of virtual channels comprises a posted command virtual channel dedicated to posted request packets, and wherein a given posted request packet communicates a request that is considered completed by a source of the request upon transmission of the request by the source, and wherein transmitting the posted request packet comprises transmitting on the posted command virtual channel; and

receiving the posted request packet in a second node of the plurality of nodes.

34. (New) The method as recited in claim 33 wherein the plurality of virtual channels further comprises a non-posted command virtual channel dedicated to non-posted request packets, wherein a given non-posted request packet communicates a request that is not completed by the source of the request until the request is completed at a target of the request, the method further comprising the first node transmitting a non-posted request packet on the non-posted command virtual channel.

35. (New) The method as recited in claim 34 wherein the plurality of virtual channels further comprises a response virtual channel to communicate response packets, wherein the method further comprises the first node transmitting a response packet on the response virtual channel.

36. (New) The method as recited in claim 35 wherein the plurality of virtual channels further comprises a probe virtual channel, the method further comprising the first node transmitting a probe packet on the probe virtual channel.

37. (New) The method as recited in claim 33 further comprising the second node storing the posted request packet in a first packet buffer within the second node.

38. (New) The method as recited in claim 37 wherein the first packet buffer is dedicated to the posted command virtual channel.

39. (New) The method as recited in claim 33 wherein the posted request packet corresponds to a write operation, the method further comprising the first node transmitting the write data corresponding to the write operation on the posted command virtual channel.

40. (New) The method as recited in claim 33 further comprising:

the first node transmitting a second packet in one of the plurality of virtual channels other than the posted command virtual channel, wherein the second packet is defined to push posted request packets; and

the second node processing the posted request packet prior to the second packet responsive to the second packet being defined to push the posted request packet.

41. (New) The method as recited in claim 40 wherein the second packet includes a sequence identification number, and wherein the posted request packet also includes a sequence identification number, and wherein the second packet is defined to push the posted request packet if the sequence identification numbers are equal and non-zero.

42. (New) The method as recited in claim 40 wherein the second packet includes a pass posted indication indicating whether or not the second packet is permitted to pass posted requests, and wherein the second packet is defined to push the posted request packet if the pass posted indication is in a state indicating that the second packet is not permitted to pass posted requests.

43. (New) The method as recited in claim 40 wherein the second packet includes a flush command.

44. (New) A computer system comprising a plurality of nodes including a first node and a second node coupled to the first node, wherein the plurality of nodes implement a plurality of virtual channels to communicate packets between nodes, and wherein the plurality of virtual channels comprises a posted command virtual channel dedicated to posted request packets, and wherein a given posted request packet communicates a request that is considered completed by a source of the request upon transmission of the request by the source, wherein the first node is configured to transmit a posted request packet on the posted command virtual channel, and wherein the second node is coupled to receive the posted request packet.

45. (New) The computer system as recited in claim 44 wherein the plurality of virtual channels further comprises a non-posted command virtual channel dedicated to non-posted request packets, wherein a given non-posted request packet communicates a request that is not completed by the source of the request until the request is completed at a target of the request, wherein the first node is configured to transmit a non-posted request packet on the non-posted command virtual channel.

46. (New) The computer system as recited in claim 45 wherein the plurality of virtual channels further comprises a response virtual channel to communicate response packets, and wherein the first node is configured to transmit a response packet on the response virtual channel.

47. (New) The computer system as recited in claim 46 wherein the plurality of virtual channels further comprises a probe virtual channel, and wherein the first node is configured to transmit a probe packet on the probe virtual channel.

48. (New) The computer system as recited in claim 44 wherein the second node is configured to store the posted request packet in a first packet buffer within the second node.

49. (New) The computer system as recited in claim 48 wherein the first packet buffer is dedicated to the posted command virtual channel.

50. (New) The computer system as recited in claim 44 wherein the posted request packet corresponds to a write operation, and wherein the first node is configured to transmit the write data corresponding to the write operation on the posted command virtual channel.

51. (New) The computer system as recited in claim 44 wherein the first node is configured to transmit a second packet in one of the plurality of virtual channels other than the posted command virtual channel, wherein the second packet is defined to push posted request packets, and wherein the second node is configured to process the posted request packet prior to the second packet responsive to the second packet being defined to push the posted request packet.

52. (New) The computer system as recited in claim 51 wherein the second packet includes a sequence identification number, and wherein the posted request packet also includes a sequence identification number, and wherein the second packet is defined to push the posted request packet if the sequence identification numbers are equal and non-zero.

53. (New) The computer system as recited in claim 51 wherein the second packet includes a pass posted indication indicating whether or not the second packet is permitted to pass posted requests, and wherein the second packet is defined to push the posted

request packet if the pass posted indication is in a state indicating that the second packet is not permitted to pass posted requests.

54. (New) The computer system as recited in claim 51 wherein the second packet includes a flush command.

55. (New) A node for a computer system, the node comprising circuitry configured to transmit a posted request packet on a posted command virtual channel of a plurality of virtual channels implemented by the node to communicate with other nodes, wherein the posted command virtual channel is dedicated to posted request packets, and wherein a given posted request packet communicates a request that is considered completed by a source of the request upon transmission of the request by the source.

56. (New) The node as recited in claim 55 wherein the plurality of virtual channels further comprises a non-posted command virtual channel dedicated to non-posted request packets, wherein a given non-posted request packet communicates a request that is not completed by the source of the request until the request is completed at a target of the request, and wherein the circuitry is configured to transmit a non-posted request packet on the non-posted command virtual channel.

57. (New) The node as recited in claim 56 wherein the plurality of virtual channels further comprises a response virtual channel to communicate response packets, and wherein the circuitry is configured to transmit a response packet on the response virtual channel.

58. (New) The node as recited in claim 57 wherein the plurality of virtual channels further comprises a probe virtual channel, and wherein the circuitry is configured to transmit a probe packet on the probe virtual channel.

59. (New) The node as recited in claim 55 wherein the posted request packet corresponds to a write operation, and wherein the circuitry is configured to transmit the write data corresponding to the write operation on the posted command virtual channel.

60. (New) The node as recited in claim 55 wherein the circuitry is configured to transmit a second packet in one of the plurality of virtual channels other than the posted command virtual channel, wherein the second packet is defined to push posted request packets, and wherein the posted request packet is processed prior to the second packet responsive to the second packet being defined to push the posted request packet.

61. (New) The node as recited in claim 60 wherein the second packet includes a sequence identification number, and wherein the posted request packet also includes a sequence identification number, and wherein the second packet is defined to push the posted request packet if the sequence identification numbers are equal and non-zero.

62. (New) The node as recited in claim 60 wherein the second packet includes a pass posted indication indicating whether or not the second packet is permitted to pass posted requests, and wherein the second packet is defined to push the posted request packet if the pass posted indication is in a state indicating that the second packet is not permitted to pass posted requests.

63. (New) The node as recited in claim 60 wherein the second packet includes a flush command.